

Paperd March 22^d 1825

An

Inaugural Essay

on

Acute Hepatitis

By

Lawrence A. W. Roane

of Virginia

Sept. 1841

Chambers Street

New York

James W. Brown

of New York

This disease is described by Dr. Cullen,
"Fever, tension, and pain either pungent or
robust in the right hypochondrium, pain at
the clavicle, and top of the right shoulder, the
patient lying with difficulty on the left side;
"dyspnoea; a dry cough, vomiting, and hiccup."

All of these symptoms are rarely
met with in the same case, it is necessary,
however, to mention in the definition of this
disease, symptoms which only occasionally
attend; because its constant symptoms are
not sufficient to distinguish it. On this
account some authors rank jaundice among
the diagnostic symptoms, but its presence
is not sufficiently frequent, to assist much
in the diagnosis.

The Liver resembles most other parts of
the body, it is subject to two species of inflam-
mation, the acute and chronic, and it has
been generally supposed, that these varieties
of the disease, consist in fact of a difference
in the absolute seat of the inflammation.

It has been suggested by some Physicians,

that the inflammation is of the acute form, when the enveloping membrane of the liver is affected; and of the chronic, when the parenchyma, or substance of the organ itself is too highly excited; while others have conceived, that the inflammation is of the acute form, when the extremities of the hepatic artery are particularly affected; and of the chronic, when the branches of the hepatic vein, or vena porta (which conveys the principal portion of blood to the liver) is the seat of morbid action; it is of very little importance, however, in a medical point of view, which of these opinions is correct.

The acute species, by its active operation, and rapid influence, unless quickly counteracted, soon prostrates the energies of life; the chronic by its slow and insidious progress, gives a check to the enjoyment of health, and gradually undermines the constitution, without immediate alarm, until the evil has proceeded so far as to often

to baffle recovery. To the former, or acute form of this disease, I shall limit this essay.

Independent of the causes producing other inflammations, such as the application of cold, external injuries from contusions or blows &c. this disease may be occasioned by violent exercise, by intense summer heat, by long continued intermittent, and remittent fevers, by high living, and an immoderate use of vinous and spiritous liquors, but more particularly the latter; (perhaps there is no other of the phlogmasia, so frequently excited by the use of spiritous liquors, as Hepatitis; its frequency in India, is ascribed by Bontius, and others, to the same use of arrack;) the various cold conditions of the Liver, are also caused among the causes of this disease.

In warm climates, this viscus is more apt to be affected, than any other part of the body; probably, as supposed by Dr. Thomas, from the increased secretion of

hile which takes place, when the blood is thrown on the internal parts, by an exposure to cold, or from the bile becoming acid, and thereby exciting an irritation in the part. Dr. Johnson ascribes it to catarrh hepatic sympathy &c. This disease is more frequent in warm than in the cold or temperate climates.

The symptoms of Acute Hepatitis, generally commence with rigors, or shiverings followed by a pungent pain in the right side, which is felt also under the margins of the ribs, shooting more particularly in the direction of the back, and to the short-spiral blade; cough; oppression in the respiration, nausea, sickness, often with a vomiting of apparently bilious matter, accompanied with considerable fever; great watchfulness, and occasional delirium; extreme thirst, the tongue generally covered with a white crust, extending also to the mouth, and fauces; depression of spirits, sometimes inaccess; loss of appetite,

The first of these is the
fact that the number of
persons in each family is
not only increasing but
the number of families is
also increasing. This is
due to the fact that the
number of persons in each
family is increasing and
the number of families is
also increasing.

The second of these is the
fact that the number of
persons in each family is
not only increasing but
the number of families is
also increasing. This is
due to the fact that the
number of persons in each
family is increasing and
the number of families is
also increasing.

and difficulty of lying, except on the
affected side; yet instances now and then
occur, where the patient is unable to lie on
either side; pressure also on the region of
the liver, where there is usually some tension,
induces considerable increase of pain, and
tendency to cough; and the cough is more
generally dry than moist; the bowels
are frequently irregular, though often
slow, than otherwise; the urine excreted
in small quantities, is of a light color,
and often tinged with bile, and attended
with a scalding sensation; the pulse is
hard, and strong, sometimes exceeding one
hundred and twenty strokes in the minute,
and at times intermitting; and it is
occasionally attended with a jaundiced skin,
arising from the bile not getting readily
into the common duct by reason of the
pressure of the inflamed liver on the peri-
hepatic.

In this disease, as well as in others,
we do not always find the symptoms of

the same degree of violence, as they are here described; thus in some cases, the fever is severe, in others scarcely perceptible; in some instances, the pain is acute and violent; in others collections of pus have been found after death, when no pain was felt. But in every inflammation of the liver, it may be observed that the symptoms are more or less acute, according to the degree of sensibility in the part affected. When the membranous covering of its superior convex part, or the ligaments which unite it to the diaphragm be inflamed, the pain, fever, and difficulty of breathing are much more violent, than when its interior pulpy substance, or its concave inferior part is affected.

Both ancient and modern physicians have drawn a distinction between the symptoms that occur, when the inflammation occupies the convex surface of the liver, and those that are present, when the disease affects the concave. "It seems

"probable," says Dr Cullen, that acute Hep-
-atitis is always an affection of the ex-
-ternal membrane of the liver, and that
the parenchyma is of the chronic kind."

When the inflammation acts with extreme
violence, the increased secretion of bile is
sometimes thrown into the first passages,
occasioning considerable derangement in the
state of the evacuations. In most cases,
the secretion of bile is profuse, though
its passage into the duodenum is oftentimes
impeded; so that jaundice is the consequence.

Fatal results of an immediate
nature, seldom attend this disease; Hemor-
-rhage upon the nose, or hemorrhoidal ef-
-flux, as likewise sweating, diarrhoea,
or an evacuation of urine depositing a
copious sediment, sometimes carry it off.

In some few instances, it has been
observed to cease on the appearance of
erysipelas on some external part.

This disease may readily be distinguished
from pneumonia, by the pain attending

into the shoulder, by the sallowness of the
countenance, by the cough being unac-
-panied by expectoration; and by a
less degree of dyspnoea. It may also
be distinguished from inflammation of the
stomach, in most instances, by the ab-
-sence of that gastric irritability, and sen-
-sibility which render gastritis so dangerous
and distressing a complaint. ^{The}
febrile symptoms, too, in hepatitis have
nothing of that low or typhoid type,
attending gastric inflammation.

From spasm of the biliary ducts, occa-
-sioned by impacted calculi, we may
distinguish this disease by the strong
febrile excitement, and many other cir-
-cumstances, especially at the beginning;
but, as Dr. Johnson has observed, spasm
will often terminate in, or rather occasion
inflammation, when the treatment must be
the same, as in original hepatitis.

In forming our prognosis of this
disease, we consider as the most favorable

signs, a gradual abatement of the pyrexial symptoms; an improvement in the com-
-pulsion, the strength not much reduced
by the remedies, return of the appetite, and
an increase in the bulk of the body.

But on the other hand, intensity of
pain in the region of the liver, a full
and frequent pulse, considerable heat,
thirst, dry skin, costiveness, and frequent
rigors denote the most unpromising result.

When suppuration has taken place, it is
indicated by a diminution of pain, weight,
in the organ, increase of the evening
paroxysm of fever, flushing of the
countenance, propensity to night sweats,
and other hectic symptoms. Continual
hiacups, cold extremities, and a smacking
pulse indicate gangrene.

Post mortem examinations, often discover
the liver much enlarged, and hard to the touch,
its colour more of a deep purple, than
natural, and its membranes more or less
affected by inflammation. They also

discover adhesions to the neighbouring parts; also tubercles, Hydatids, and sometimes large abscesses containing a considerable quantity of Pus; Biliary Calculi are now and then met with. In a few instances, the liver has been found in a putrid state resembling a Honey comb.

In communicating the treatment of any disease, general principles can alone be given; in many instances, certain varieties occur, requiring in their application, judgment, experience, and observation; a precise mark of proceeding cannot therefore be laid down, adapted to each constitution, and Habit; Hence much must be left to the discretion of every practitioner.

In the treatment of acute Hepatitis the usual means of abating inflammation, are to be rigorously pursued, by tenaciously adhering to the antiphlogistic regimen.

General, and copious bleedings having been procured, topical depletion should

be merely recommended to; this is to be effected either, by cupping, or the application of leeches over the region of the liver. Should the severity of the pain, and the increased vascular action, continue unabated, venesection should be repeated again very soon; for no time is to be spared, in arresting the progress of this violently acute stage of the disease. By neglecting to bleed under such circumstances, there will be danger of suppuration ensuing.

General bleeding in this disease, has been disapproved by some authors, and local depletion by cupping, or leeches recommended in its place; this may be the correct practice in those cases unattended with much pain, or pyrexia, or where the disease has followed a bad intermittent, or remittent fever, and the patient consequently left in a cachectic state. But in those, where the pain is acute, the pulse full and strong, and the febrile thirst, and heat considerable, copious, and

repeated venesection at an early period of the disease will be necessary; the blood should be drawn away at once, in a quantity proportioned to the age and temperament of the patient, and urgency of the symptoms; it should also be evacuated *"per vias"*; as physicians have at all times noticed the effect of detracting blood from a congested orifice in inflammatory diseases.

As co-operating to the same end, Cathartics are advantageously used in this disease; to the mercurial, I should give the preference; they should be early, and freely administered, and every available means exerted, to emulge the liver of its bilious secretions.

The exhibition of Carthartics, should not, however supersede the use of copious mild enemata, which are particularly serviceable, both as a fomentation, and a means of removing irritation, and supporting a discharge from the intestines. ^{To} fomentations have been more frequently employed in this disease, than in most of the plegmasia,

and often attended with considerable adven-
-age; in very severe cases, the warm Bath
has been advised.

Should the symptoms continue unabated, after
the adoption of those measures, the application
of a large blister should be made over
the region of the liver; and should it evince
a disposition to ^{heal} prematurely to the desired intention,
it should be reapplied; and all writers on
the subject, recommend a repetition of blisters,
in preference to supporting a discharge from
the same one, by any stimulating ointment.

To these more active measures, should
be united the liberal use of Refrigerants, such
as solutions of the neutral salts &c., the
free admission of cool air into the apartment
of the patient; and in this, as in the com-
-mencement of all acute diseases, a ferma-
-ceous or gruel diet should be rigidly enjoined,
and animal food positively, and unyielding-
-ly forbidden.

At this conjuncture, the approaches often prove
serviceable; and as in other inflammatory

complaints, a diaphoresis may be excited, by nauseating doses of Tartarized Antimony, to which we may sometimes unite with advantage, the nitrate of Potash. As an auxiliary, the pediluvium, with a free employment of mild diluent, and cooling liquids have been recommended.

This treatment ought to be pursued with such modifications, as the condition and advancement of the case require.

Should considerable irritability prevail after the active employment of the means for cutting inflammation, advantage may be derived, from the union of some mild sedative and aperient medicine.

A recovery will generally be secured, by pursuing this mode of treatment; making such alterations in the regimen &c. as the improvement of the constitution, and the ability of the digestive organs, will admit of well remembering, that the diet should be of the mildest description, even long after convalescence has been established, otherwise, considerable

risk of a reproduction of the inflammatory excitement will be incurred; as soon ^{as possible} ~~however~~, ^{however} without risking the danger of a relapse, low medicines, together with an invigorating diet, and wine, are to be employed; for few complaints leave behind them, more languor, and debility; at the same time, the necessity of strictly avoiding all the exciting causes, should be rigidly enjoined on the patient.

Such is the most approved practice recommended in the cure of Acute Hepatitis, "yet should it, from extraordinary obstinacy, or defective practice - says Professor Chapman, prove refractory to the remedies mentioned, then a thorough mercurial course only can be trusted. All other modes of treatment, in confirmed Hepatitis, are only feeble temporizing, or dangerous temporizing."

Should we with the mercurial impulsion to be soon induced. we may employ mercury internally, as well as externally; and to make its effects the more certain, we may unite small portions of Opium with it. . .

I have thus finished a short essay on
Acute Hepatitis; - and that it must be
deficient in perspicuity of style, and
unadorned with the elegance of language,
I am fully aware; but I believe, as
far as I have been able to obtain infor-
-mation on the subject - it embraces the
true symptoms, pathology, and treatment of
the disease; and this is all I aimed at.

I will therefore conclude, by acknow-
-ledging, how much I feel myself indebted
to the Professors of this University, individually,
for the valuable instruction received from
them, and that they may long enjoy,
the Honor, prosperity, and Happiness so justly
due to their univalled exertions, in dissem-
-inating Knowledge, so highly beneficial
to Mankind, is my Emire wish.

